Permit No.: MTX000088

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

AUTHORIZATION TO DISCHARGE UNDER THE
MONTANA GROUND WATER POLLUTION CONTROL SYSTEM

In compliance with the Montana Water Quality Act, Title 75, Chapter 5, Montana Code Annotated (MCA) and the Administrative Rules of Montana (ARM) 17.30. Subchapter 5, Subchapter 7, and Subchapter 10 *et seq*.

Lang Creek Brewery, Inc.

is authorized to discharge from the **Lang Creek Brewery** to its sub-surface disposal system,

located in the **SE ¼, SW ¼, Section 18, Township 26 North, Range 26 West, in Flathead County**

to receiving waters, **Class I ground water,**

in accordance with discharge point(s), effluent limitations, monitoring requirements and other conditions set forth herein. Authorization for discharge is limited to the outfall(s) specifically listed in the permit. The numeric effluent limits, water quality standards, and trigger values/nonsignificance criteria specified herein support and serve to define the absence of a ground water mixing zone for receiving water.

This permit shall become effective: **{at least 30 full days and on the first full month following the date of issuance}**.

This permit and the authorization to discharge shall expire at midnight, **{5 years after the effective date}**.

FOR THE MONTANA DEPARTMENT OF
ENVIRONMENTAL QUALITY

DRAFT

Jenny Chambers, Bureau Chief
Water Protection Bureau
Permitting & Compliance Division

Issued: _____

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I. EFFLUENT LIMITATION AND MONITORING REQUIREMENT

A. Description of the Discharge Point

The authorization to discharge provided under this permit is limited to the outfalls that are specifically designated below as the discharge locations. Discharges at any location not authorized under an MGWPCS permit is a violation of the Montana Water Quality Act and could subject the person(s) responsible for such discharge to penalties under the Act. Knowingly discharging from an unauthorized location or failing to report an unauthorized discharge within a reasonable time from first learning of an unauthorized discharge could subject such person to criminal penalties as provided under Section 75-5-632 of the Montana Water Quality Act.

Outfall Serial Number	Description of Discharge Point
001	Outfall 001 is the land application site located at 48° 0' 16.9" North latitude and -115° 0' 9.2" West longitude, in the west portion of the property. Land application is used during the summer months from April through October. No ground water mixing zone was requested.
002	Outfall 002 is the subsurface drainfield located at 48° 0' 17.5" North latitude and -115° 0' 6.5" West longitude, west of the production area. The subsurface drainfield is used during the winter months from November through February. No ground water mixing zone was requested.

B. Specific Effluent Limitations

Effective immediately and lasting through the term of the permit, the quality of effluent discharged by the facility shall, at a minimum, meet the limitations set forth in Table 1.

Table 1. Numeric Effluent Limits for Outfall 001 and 002 (at the dose tank)

Parameter, units	**Concentration Daily Maximum[(1)]**	**90-Day Average Load[(1)] (pounds per day)[(2)]**
Nitrate (as N), mg/L	7.5	0.04[(2)]
E-Coli Bacteria, organisms/100 ml	Less than 1	NA
Total Phosphorous (TP), mg/L	NA	0.06
Specific Conductivity, umhos/cm	1,000	NA

[(1)]See definitions, Part V of the permit

[(2)]Average daily load calculation: lb/d = Nondegradation WQ Standard concentration (mg/L) x flow (gpd) x 8.34×10^{-6}

NA = Not Applicable

Other Discharge Limitations:

The combined average daily flow discharged to Outfall 001 or 002 shall not exceed 685 gallons per day (gpd).

C. Self-Monitoring Requirements

1. As a minimum, upon the effective date of this permit, the parameters in Table 2 and Table 3 shall be monitored at the frequency and with the type of measurement indicated; samples or measurements shall be representative of the volume and nature of the monitored discharge. Influent monitoring shall occur from the 2,000-gallon septic tank used as the aeration tank, which is the first point of control and is located prior to the settling tank. Composite influent samples shall be collected at the aeration tank. The monitoring and reporting periods for the parameters in Table 2 are quarterly. Effluent monitoring shall occur from the 800-gallon siphon dose tank prior to discharge to the land application site or the subsurface drainfield. Composite effluent samples shall be collected at the 800-gallon dose tank. The monitoring and reporting periods for the parameters in Table 3 are quarterly.

Table 2. Parameters to be Monitored in the Influent

Parameter, units	Frequency	Sample Type[1]
Nitrate (as N), mg/L	Quarterly	Composite
Total Kjeldahl Nitrogen, as N (TKN), mg/L	Quarterly	Composite
BOD_5, mg/L	Quarterly	Composite
Total Suspended Solids (TSS), mg/L	Quarterly	Composite
Total Nitrogen (TN), mg/L	Quarterly	Calculated[2]

(1) See definitions, Part V of the permit.
(2) Total Nitrogen (as N) TN = (nitrate + nitrite, as N) + total Kjeldahl Nitrogen, as N (TKN)

2. The Total Nitrogen (TN) concentration is the sum of nitrate + nitrite (as N) and total Kjeldahl nitrogen, (as N) (TKN) in mg/L.

Table 3. Outfall 001 and 002 Parameters Monitored in the Effluent (from one common sample to be collected at the dose tank) prior to Discharge to the Land Application Site or the Subsurface Drainfield

Parameter, units	Frequency	Sample Type[1]
Effluent Flow Rate, gpd	Continuous	Continuous
Biological Oxygen Demand (BOD_5), mg/L	Quarterly	Composite
Total Kjeldahl Nitrogen (TKN), mg/L	Quarterly	Composite
Nitrate (as N), mg/L	Quarterly	Composite
Total Suspended Solids (TSS), mg/L	Quarterly	Composite
pH, s.u.	Quarterly	Grab
Total Phosphorous (TP), mg/L	Quarterly	Composite
Total Phosphorous (TP), lb/d	Quarterly	Calculated
Fats, Oils, and Grease, mg/L	Quarterly	Grab
E-Coli Bacteria, organisms/100 mL	Quarterly	Grab
Total Nitrogen (as N), mg/L	Quarterly	Calculated[2]
Total Nitrogen (as N), lb/d	Quarterly	Calculated

(1) See definitions, Part V of the permit
(2) Total Nitrogen (TN) is the sum of nitrate + nitrite (as N) and total Kjeldahl nitrogen (as N).

3. The TN and total phosphorus (TP) loads shall be calculated quarterly using the quarterly averages for flow and daily maximum concentration using the following equations:
   TN (lb/d) = TN(mg/L) x flow (gpd) x 8.34×10^{-6}
   TP (lb/d) = TP(mg/L) x flow (gpd) x 8.34×10^{-6}

4. The permittee shall install a continuous totalizing flow meter(s) that is capable of recording the total monthly flow and the peak daily flow in gallons per day (gpd) to Outfall 001 and 002. Since there are two separate outfalls used at different times during the year (summer and winter), the

location(s) of the flow meter(s) in the treatment-train will dictate the number of meters required to accurately measure the flow year-around. Accurate records must be kept by the permittee identifying where the effluent is being discharged, either to the land application site (Outfall 001) or the drainfield (Outfall 002).

5. As a minimum, upon the effective date of this permit, the parameters in Table 4 shall be monitored at the frequency and with the type of measurement indicated; samples or measurements shall be representative of the ground water from MW1A. The monitoring and reporting periods for the parameters in Table 4 are quarterly.

Table 4. Ground Water Monitoring Parameters for Monitoring Wells MW1A

Parameter, units	Frequency	Sample Type(1)
Static Water Level (SWL) (feet below top of casing)	Quarterly	Measured
pH, s.u.	Quarterly	Grab
E-Coli Bacteria, organisms/100 ml	Quarterly	Grab
Chloride, mg/L	Quarterly	Grab
Total Ammonia (as N), mg/L	Quarterly	Grab
Nitrate (as N), mg/L	Quarterly	Grab
Total Phosphorous (TP), mg/L	Quarterly	Grab
Specific Conductivity, µmhos/cm	Quarterly	Grab

(1) See definitions in Part V of this permit.

6. The permittee has constructed a shallow ground water monitoring well (MW1A) for Outfall 001 and Outfall 002. MW1A shall serve as a monitoring point for trigger values and water quality standards in the ground water. MW1A will serve as a monitoring well for *E-Coli* bacteria, to ensure natural disinfection is effectively treating the bacteria. MW1A is located approximately 100 feet generally hydraulically downgradient from the subsurface drainfield (Outfall 002) and potentially downgradient from the land application site (Outfall 001) in an east-southeast direction. MW1A is a shallow well completion with 5 feet of slotted 2-inch PVC pipe to a total depth of approximately 11.1 feet. The Department has approved this well location and completion for shallow ground water quality monitoring purposes related to Outfall 001 and 002, until such time when the direction of shallow ground water flow at the site is better defined (see Part I. E. “Compliance Schedule” Table 6 of this permit). MW1A shall be secured and maintained according to ARM 17.50.707.

7. No later than sixty days from the date of permit issuance, the permittee shall

revise/update, develop, and maintain onsite a copy of the standard operating procedures (SOP)/Sampling and Analysis Plan (SAP), as well as general ground water monitoring well operation and maintenance (O & M) proposed for monitoring MW1A. These procedures should address at a minimum, well purging, equipment and procedures; sample collection, specifying sampling equipment and procedures, equipment decontamination procedures, and sample storage, as well as the laboratory and transportation procedures to the lab.

8. Specific Ground Water Trigger Values

If the trigger values given in Table 5 are exceeded, requirements as outlined in Part I.D.3. Special Conditions- "Corrective Action Ground Water Monitoring" of the permit shall be followed.

Table 5. Ground Water Trigger Values for Monitoring Well MW1A

Parameter, units	Trigger Values
E-Coli Bacteria, organisms/100 m*l*	Equal to or greater than 1
Nitrate (as N), mg/L	7.5
pH, s.u.	Less than 6.5, or greater than 8.5

D. SPECIAL CONDITIONS

1. Prohibitions

The permittee shall not allow any user to introduce into the treatment works any other wastes.

2. Corrective Action Effluent Monitoring: Upon an exceedence of any of the "Specific Effluent Limitations" set forth in Part I. Section B. of this permit for two consecutive reporting periods (2 quarters) the Department will require the submittal of a work plan in which the permittee may be required to increase effluent sampling frequency and/or parameters, increase the efficiency of the wastewater treatment system, reduce the amount of nutrients and pathogens discharged into the subsurface, establish surface water monitoring locations at the nearest expression of surface water found east of the facility, and monitor/sample the surface water for parameters the Department determines are of concern.

3. Corrective Action Ground Water Monitoring: Upon an exceedence of a water quality standard(s), trigger value(s) and/or ground water quality compliance limit(s) in a monitoring well(s) for a parameter(s) listed in Table 5 of this permit, the permittee shall immediately (within 72 hours of receiving laboratory results) re-sample the well(s) and notify the Department within 24 hours of receiving results of conformational sampling. Based on the results, the Department may direct the permittee to implement one or more of the following contingency measures:

   a. In coordination with the Department, review water quality trends, discharge data, and other site activities to identify the probable cause and extent of the water quality changes.
   b. Increase sampling (frequency and/or constituents).
   c. Install additional ground water monitoring wells, including an upgradient well.
   d. Install disinfection to the effluent prior to discharge into the subsurface drainfield to lower concentrations of the *E-Coli* bacteria, if that was the parameter that exceeded the water quality standard/trigger value.
   e. Suspend any additional connections to the wastewater system until the cause of the exceedance(s) has been determined, remediation measures taken, and measures implemented to prevent a reoccurrence.
   f. Implement other measures as determined by the Department, which may include invoking provisions set forth in Part IV. Section O of this permit.

4. At a minimum, a 300-foot "buffer zone" shall be maintained from the hydraulically downgradient boundary of the land application site to the Thompson River.

5. There shall be no evidence of damaged vegetation within or immediately bordering the land application site. Effluent shall be applied at agronomic rates such that infiltration into the soils shall occur. No ponding of liquids shall be evident on the ground surface at the application site. Land application shall not occur during periods of high intensity rainfall or while soils are saturated, frozen, or snow covered. Corrective action may

include, but is not limited to providing additional effluent treatment or expanding and updating the application area and methodology.

6. Odors shall be controlled at the discharge areas (Outfalls 001 and 002).

E. COMPLIANCE SCHEDULE

A compliance schedule is included in the permit (see Table 6) to allow a reasonable opportunity for the permittee to attain compliance with the requirements issued and/or revised in the permit renewal, and lead the permittee into compliance with the Water Quality Act and the Administrative Rules of Montana (ARM 17.30.1350). Compliance must be achieved as soon as possible, but no later than the scheduled dates of compliance and interim dates for progress reports. The permittee must notify the Department in writing no later than 14 days following each interim date with a progress report and a comprehensive final report no later than 14 days from the final date of compliance.

Table 6. Compliance Schedule

Compliance Deadline Date (from Issuance of	Applicable Citation (Law/Rule)	Action Required to Come Into Compliance

the Permit Renewal)		
Immediately	ARM 17.30.1023(5)(a) "local hydrogeology"	Begin measuring ground water levels quarterly in the two (2) nearby shallow ground water wells (Doug & Kelly Wilkey's rental house and the shallow brewery's water supply well), in addition to quarterly ground water level measurement required in the existing monitoring well (MW1A).
90 days	75-5-602, MCA "monitoring equipment"	Install an effluent totalizing flow meter and provide the 90-day average flow rate in gpd as required on a quarterly frequency. Each quarter, report the 90-day average flow rate (gpd) and the effluent discharge point/location (i.e., subsurface drainfield, or land application site). Submit a report detailing the location and type of flow meter installed, include meter calibration timeframes.
180 days	75-5-402(2), MCA 75-5-103(28), MCA "Performance standard"	Repair/replace/upgrade the aerator, consider a longer settling time in the settling tank, and re-evaluate and upgrade the primary treatment system to reduce BOD levels in the effluent being discharged at the dose tank. Land application shall be applied at agronomic rates over the entire designated LA area (see Part XI.E of this SOB), maintaining the 300-foot buffer area from the river. Submit a report with the specifications and changes made to the treatment system and the land application operation and site. Provide a current operation and maintenance (O & M) plan, particularly regarding tank sludge removal, transportation and final disposition of the sludge
1 year	75-5-402(2), MCA 75-5-103(28), MCA "Performance standard"	Clean out, repair or replace and update the subsurface drainfield, as needed to maintain efficient subsurface discharge. Include these procedures in the (above) O & M plan. Submit a report of the upgrades to the drainfield area.
4 years	ARM 17.30.1023(4)(e) & (5)(a) "location . . . . springs"	Survey the elevations of the two (2) nearby shallow wells and MW1A. Use the quarterly static water level (SWL) measurements that LCB has been measuring (according to the first compliance item) from all three (3) shallow wells to calculate the ground water elevations for each of the three wells. Construct ground water flow maps that demonstrate the accurate shallow ground water flow direction(s) and any seasonal variations occurring at the site.
4 years	75-5-602(2), MCA "Provide Reports"	Submit the final hydrogeological report with ground water flow maps.
4.25 years	75-5-602(2), MCA "Provide Reports"	Collect a representative sample of the effluent for the expanded analyses required in Section N of the GW-2 (see Part XI.B. of this statement of basis and Part I.E. of the permit).

II. MONITORING, RECORDING AND REPORTING REQUIREMENTS

A. Representative Sampling

Influent and effluent samples taken in compliance with the monitoring requirements established under Part I shall be collected from the distribution/equalization tank and the dose tank, respectively, prior to entering the SBR and the drainfield. Samples shall be representative of the volume and nature of the monitored medium.

B. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under Part 136, Title 40 of the Code of Federal Regulations, unless other test procedures have been specified in this permit. All flow-measuring and flow-recording devices used in obtaining data submitted in self-monitoring reports must indicate values within 10 percent of the actual flow being measured. Flow meter calibration must be done on a yearly basis and documented for the record.

C. Penalties for Tampering

The Montana Water Quality Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $25,000, or by imprisonment for not more than six months, or by both.

D. Reporting of Monitoring Results

Self-monitoring reports shall be submitted to the Department quarterly. Monitoring results obtained during the previous reporting period shall be summarized and reported on a Discharge Monitoring Report Form (EPA No. 3320-1), postmarked no later than the 28th day of the month following the completed reporting period. Following the issuance of this permit, if no discharge occurs during the reporting period, "no discharge" shall be reported. Legible copies of these, and all other reports required herein, shall be signed and certified in accordance with the Signatory Requirements (Part IV, Section G) and submitted to the Department at the following address:

Montana Department of Environmental Quality
Water Protection Bureau
PO Box 200901
Helena, Montana 59620
Phone: (406) 444-3080

All reports, notifications and inquires regarding compliance with this permit shall be submitted to the Department at the above address.

E. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on interim and final

requirements contained in any Compliance Schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using approved analytical methods as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report. Such increased frequency shall also be indicated.

G. Records Contents

Records of monitoring information shall include:

1. The dates, exact place, and time of sampling or measurements;
2. The initials or name(s) of the individual(s) who performed the sampling or measurements;
3. The date(s) analyses were performed;
4. The time analyses were initiated;
5. The initials or name(s) of individual(s) who performed the analyses;
6. References and written procedures, when available, for the analytical techniques or methods used; and,
7. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results.

H. Retention of Records

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time. Data collected on site, copies of monitoring reports, and a copy of this MGWPCS permit must be maintained on site during the duration of activity at the permitted location.

I. Twenty-four Hour Notice of Noncompliance Reporting

The permittee shall report serious incidents of noncompliance as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances. The report shall be made to the Water Protection Bureau at (406) 444-3080 or the Office of Disaster and Emergency Services at (406) 841-3911. The following examples are considered serious incidents:

1. Any noncompliance which may seriously endanger health or the environment;

2. Any unanticipated bypass which exceeds any effluent limitation in the permit (See Part IV.G of this permit, "Bypass of Treatment Facilities");

3. Any upset which exceeds any effluent limitation in the permit (See Part IV.H of this permit, "Upset Conditions").

4. A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:

   a. A description of the noncompliance and its cause;

   b. The period of noncompliance, including exact dates and times;

   c. The estimated time noncompliance is expected to continue if it has not been corrected; and,

   d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

5. The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Water Protection Bureau, by phone, at (406) 444-3080.

6. Reports shall be submitted to the addresses in Part II.D of this permit, "Reporting of Monitoring Results".

J. Other Noncompliance Reporting

Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for Part II.D of this permit are submitted. The reports shall contain the information listed in Part II.I.4 of this permit.

K. Inspection and Entry

The permittee shall allow the head of the Department or the Director or an authorized representative thereof, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and,

4. Sample or monitor at reasonable times, for the purpose of assuring permits compliance, any substances or parameters at any location.

III. COMPLIANCE RESPONSIBILITIES

A. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give the Department and the Director advance notice of any planned changes at the permitted facility or of an activity which may result in permit noncompliance.

B. Penalties for Violations of Permit Conditions

The Montana Water Quality Act provides that any person who violates a permit condition of the Act is subject to civil or criminal penalties not to exceed $25,000 per day or one year in prison, or both, for the first conviction, and $50,000 per day of violation or by imprisonment for not more than two years, or both, for subsequent convictions. MCA 75-5-611(a) also provides for administrative penalties not to exceed $10,000 for each day of violation and up to a maximum not to exceed $100,000 for any related series of violations. Except as provided in permit conditions on Part III.G of this permit, "Bypass of Treatment Facilities" and Part III.H of this permit, "Upset Conditions", nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

C. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit, which has a reasonable likelihood of adversely affecting human health or the environment.

E. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. However, the permittee shall operate, as a minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve permit effluent compliance.

F. Removed Substances

Collected screenings, grit, solids, sludges, or other pollutants removed in the course of treatment shall be disposed in such a manner so as to prevent any pollutant from entering any waters of the state or creating a health hazard. Sludge shall not be directly blended with or enter either the final plant discharge and/or waters of the United States. Any sludges removed from the facility shall be disposed of in accordance with 40 CFR 503, 258 or other applicable rule. EPA and MDEQ shall be notified at least 180 days prior to such disposal taking place.

G. Bypass of Treatment Facilities

1. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts III.G.2 and III.G.3 of this permit.

2. Notice:

a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten (10) days before the date of the bypass.

b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required under Part II.I of this permit, "Twenty-four Hour Reporting".

3. Prohibition of Bypass.

a. Bypass is prohibited and the Department may take enforcement action against a permittee for a bypass, unless:

(1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and,

(3) The permittee submitted notices as required under Part III.G.2 of this permit.

b. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in Part III.G.3.a of this permit.

H. Upset Conditions

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part IV.H.2 of this permit are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review (i.e., Permittees will have the opportunity for a judicial determination on any claim of upset only in an enforcement action brought for noncompliance with technology-based permit effluent limitations).

2. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

   a. An upset occurred and that the permittee can identify the cause(s) of the upset;
   b. The permitted facility was at the time being properly operated;
   c. The permittee submitted notice of the upset as required under Part II.I of this permit, "Twenty-four Hour Notice of Noncompliance Reporting"; and,
   d. The permittee complied with any remedial measures required under Part IV.D of this permit, "Duty to Mitigate".

3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

IV. GENERAL REQUIREMENTS

A. Planned Changes

The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

1. The alteration or addition could significantly change the nature or increase the quantity of pollutant discharged. This notification applies to pollutants which are not subject to effluent limitations in the permit; or,

2. There are any planned substantial changes to the existing sewage sludge management practices of storage and disposal. The permittee shall give the Department notice of any planned changes at least 180 days prior to their implementation.

B. Anticipated Noncompliance

The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements.

C. Permit Actions

This permit may be revoked, modified and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

D. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application must be submitted at least 180 days before the expiration date of this permit.

E. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for revoking, modifying and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit.

F. Other Information

When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Department, it shall promptly submit such facts or information with a narrative explanation

of the circumstances of the omission or incorrect submittal and why they weren't supplied

earlier.

G. Signatory Requirements

All applications, reports or information submitted to the Department shall be signed and certified.

1. All permit applications shall be signed by either a principal executive officer or ranking elected official.

2. All reports required by the permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is considered a duly authorized representative only if:

   a. The authorization is made in writing by a person described above and submitted to the Department; and,

   b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

3. Changes to authorization. If an authorization under Part IV.G.2 of this permit is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part IV.G.2 of this permit must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

4. Certification. Any person signing a document under this section shall make the following certification:

   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

H. Penalties for Falsification of Reports

The Montana Water Quality Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than $25,000 per violation, or by imprisonment for not more than six months per violation, or by both.

I. Availability of Reports

Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. As required by the Clean Water Act, permit applications, permits and effluent data shall not be considered confidential.

J. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

K. Property or Water Rights

The issuance of this permit does not convey any property or water rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

L. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

M. Transfers

This permit may be transferred to a new permittee if:

1. The current permittee notifies the Department at least 30 days in advance of the proposed transfer date;

2. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them;

3. The Department does not notify the existing permittee and the proposed new permittee of intent to revoke or modify and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part IV.M.2 of this permit; and

4. Required annual, application, and transfer fees have been paid.

N. Fees

The permittee is required to submit payment of an annual fee as set forth in ARM 17.30.201. If the permittee fails to pay the annual fee within 90 days after the due date for the payment, the Department may:

1. Impose an additional assessment consisting of 15% of the fee plus interest on the required fee computed at the rate established under 15-1-216(3), MCA, or

2. Suspend the processing of the application for a permit or authorization or, if the nonpayment involves an annual permit fee, suspend the permit, certificate or authorization for which the fee is required. The Department may lift suspension at any time up to one year after the suspension occurs if the holder has paid all outstanding fees, including all penalties, assessments and interest imposed under this sub-section. Suspensions are limited to one year, after which the permit will be terminated.

O. Reopener Provisions

This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations (and compliance schedule, if necessary), or other appropriate requirements if one or more of the following events occurs:

1. Water Quality Standards: The water quality standards of the receiving water(s) to which the permittee discharges are modified in such a manner as to require different effluent limits than contained in this permit.

2. Water Quality Standards are Exceeded: If it is found that water quality standards in the receiving waters, excluding mixing zones as designated by ARM 17.30.501-17.30-518, are exceeded for parameters included in the permit, the department may modify the effluent limits or water management plan.

3. TMDL or Wasteload Allocation: TMDL requirements or a wasteload allocation is developed and approved by the Department and/or EPA for incorporation in this permit.

4. Water Quality Management Plan: A revision to the current water quality management plan is approved and adopted which calls for different effluent limitations than contained in this permit.

5. Toxic Pollutants: A toxic standard or prohibition is established under Section 307(a) of the Clean Water Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit.

P. Biosolids

Sewage sludge (which is not landfilled in accordance with solid waste regulation at 40 CFR Part 258) must meet all applicable requirements for disposing of sludge through land application or surface disposal site at 40 CFR Part 503. The regulations are administered by the U.S. Environmental Protection Agency.

Implement other measures as determined by the Department, which may include invoking the permit condition set forth in Part IV. O., "Reopener Provisions".

V. DEFINITIONS

1. "**30-day (and monthly) average**," other than for fecal coliform bacteria, means the arithmetic average of all samples collected during a consecutive 30-day period or calendar month, whichever is applicable. Geometric means shall be calculated for fecal coliform bacteria. The calendar month shall be used for purposes of reporting self-monitoring data.

2. **"90-day (and quarterly) average,"** other than for fecal coliform bacteria means the arithmetic average of all samples collected during a consecutive 90-day period or 3 calendar months, whichever is applicable. Geometric means shall be calculated for fecal coliform bacteria. The calendar quarter shall be used for purposes of reporting self-monitoring data.

3. **"90-day Average Load"** means the arithmetic mean of all 90-day or quarterly average loads reported during a calendar quarter for a monitored parameter.

4. **"BOD_5"** means a measurement of the amount of oxygen utilized by the decomposition of organic material, over a five-day period of time in a wastewater sample; it is used as a measurement of the readily decomposable organic content of wastewater.

5. **"Bypass"** means the intentional diversion of waste streams from any portion of a treatment or storage facility.

6. **"Composite sample"** means a sample composed of two or more discrete samples and shall be flow proportioned. The aggregate samples will reflect the average water quality covering the compositing or sample period. The composite sample shall, as a minimum, contain at least four (4) samples collected over the compositing period. Unless otherwise specified, the time between the collection of the first sample and the last sampled shall not be less than six (6) hours nor more that 24 hours. Acceptable methods for preparation of composite samples are as follows:

   a. Constant time internal between samples, sample volume proportional to flow rate at time of sampling;
   b. Constant time internal between samples, sample volume proportional to total flow (volume) since last sample. For the first sample, the flow rate at the time the sample was collected my be used;
   c. Constant sample volume, time interval between samples proportional to flow (i.e., sample taken every "X" gallons of flow); and ,
   d. Continuous collections of sample, with sample collection rate proportional to flow rate.

7. **"Continuous"** means the measurement of effluent flow which occurs without

interruption throughout the operating hours of the facility, except for infrequent shutdowns for maintenance process changes, or other similar activities.

8. **"Daily Maximum Limit"** means the maximum allowable discharge of a pollutant during a calendar day. Expressed as units of mass, the daily discharge is cumulative mass discharged over the course of the day. Expressed as a concentration, it is the arithmetic average of all measurements taken that day.

9. **"Department"** means the Montana Department of Environmental Quality.

10. **"Grab"** sample, for monitoring requirements, means a single "dip and take" sample collected at a representative point in the discharge stream or monitoring well.

11. **"Instantaneous"** measurement, for monitoring requirements, means a single reading, observation, or measurement.

12. **"Load limits"** means mass-based discharge limits expressed in units such as lb/day

13. **"Mixing zone"** means a limited area of a surface water body or aquifer where initial dilution of a discharge takes place and where water quality changes may occur. Also recognized as an area where certain water quality standards may be exceeded.

14. **"Nondegradation"** means the prevention of a significant change in water quality that lowers the quality of high-quality water for one or more parameters. Also, the prohibition of any increase in discharge that exceeds the limits established under or determined from a permit or approval issued by the Department prior to April 29, 1993.

15. **"Other wastes"** means garbage, municipal refuse, decayed wood, sawdust, shavings, bark, lime, sand ashes, offal, night soil, oil, grease, tar, heat, chemicals, dead animals, sediment, wrecked or discarded equipment, radioactive materials, solid waste, and all other substances that may pollute state waters.

16. **"Process wastewater"** means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

17. **"Semi-Annual Average"** means the arithmetic average of all samples collected during a consecutive 180-day period or 6 calendar months, whichever is applicable.

18. **"Severe property damage"** means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean

economic loss caused by delays in production.

19. **"TMDL"** means the total maximum daily load of a parameter, representing the estimated assimilative capacity for a water body before other designated uses are adversely affected. Mathematically, it is the sum of waste load allocations for point sources, load allocations for non-point and natural background sources, and a margin of safety.

20. **"TSS"** means total suspended solids, which is a measure of the filterable solids present in a sample, as determined by the method specified in 40 CFR part 136.